

In the Claims

Claims 1-6 are pending in the application, as claims 7-20 were previously withdrawn. Please amend claim 1 as follows. Claims 2-6 remain unchanged.

1. (currently amended) A malfunction detection circuitry for a dielectric etch system comprising:

a first comparator coupling between a first magnet driver of the dielectric etch system and a first electromagnetic coil of a plurality of coils of the dielectric etch system; and,

a relay coupling the first comparator to ground and turning off a power source for the dielectric etch system when the first comparator yields a substantially non-zero current, indicating that a malfunction has been detected in one or more of the first magnet driver and the first electromagnetic coil.

2. (currently amended) The malfunction detection circuitry of claim 1, further comprising a second comparator coupling between a second magnet driver of the dielectric etch system and a second electromagnetic coil of the plurality of coils of the dielectric etch system, the second comparator connected in parallel with the first comparator, such that the relay couples the first comparator and the second comparator as connected in parallel with one another to ground and turns off the power source when at least one of the first comparator and the second comparator yields a substantially non-zero current, indicating that a malfunction has been detected in one or more of the first magnet driver, the second magnet driver, the first electromagnetic coil, and the second electromagnetic coil.

3. (currently amended) The malfunction detection circuitry of claim 1, further comprising a first normally open switch coupling the relay to the power source for the dielectric etch system, such that the relay closes the first normally open switch when the first comparator yields the substantially non-zero current.

4. (currently amended) The malfunction detection circuitry of claim 3, wherein the relay further comprises a second normally open switch between the first normally open switch and a negative voltage, such that the substantially non-zero current causes the second normally open switch to close, which in turn causes the first normally open switch to close.

5. (currently amended) The malfunction detection circuitry of claim 1, wherein the first comparator compares current running between the first magnet driver and the first electromagnetic coil to a configurable preset current, such that the first comparator yields the substantially non-zero current when the current running between the first magnet driver and the first electromagnetic coil varies from the configurable preset current by more than a predetermined threshold.

6. (original) The malfunction detection circuitry of claim 5, wherein the predetermined threshold is substantially zero.

7.-20. (withdrawn)